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B
amount of an anti-idiotypic vascular endothelial growth factor antibody which is circulating, targets angiogenic endothelial cells and is a ligand of the human KDR receptor or of the murine flk-1 receptor, without affecting quiescent endothelial cells, wherein said antibody is not a ligand of flt.--

Amend claim 22 as follows:

B
--22. (amended) Method for stimulation of physiological angiogenesis, increasing the speed of formation of blood vessels in the course of cicatrization or maturation of the corpus luteum of the ovary, or for stimulation of angiogenesis in the course of obstructive pathologies of vessels, in order to reperfuse regions rendered ischemic during vascular thrombosis, comprising administering to a patient in need of such treatment an effective amount of anti-idiotypic antibodies that are ligands of the human KDR receptor or the murine flk-1 receptor and not ligands of flt.--

Amend claim 23 as follows:

B
--23. (amended) Method for treatment of pathologies requiring inhibition of angiogenesis, comprising administering to a patient in need of such treatment an effective amount of anti-idiotypic antibodies associated with a toxin or a radioactive element or of the Fab fragment of anti-idiotypic antibodies, said antibodies being ligands of the human KDR receptor or the murine flk-1 receptor and not ligands of flt.--

Amend claim 26 as follows:

C/C1

--26. (amended) Anti-idiotypic vascular endothelial growth factor antibody, having the following properties:

- B3*
 - [-] a) it targets angiogenic endothelial cells,
 - [-] b) it is circulating,
 - [-] c) it has a half-life of about 23 days, especially about 21 days, and in particular 22.5 days,
 - [-] d) it induces phosphorylation on a tyrosine of a protein of 200 kDa,
 - [-] e) it induces proliferation of vascular endothelial cells,
 - [-] f) it does not induce migration of endothelial cells,
 - [-] g) it stimulates angiogenesis,
 - [-] h) it does not cause arterial hypotension, and
 - [-] i) it does not affect the permeability of vessels.--

Amend claim 29 as follows:

B4

--29. (amended) Complex between an anti-idiotypic antibody according to claim 25 and a toxin, [in particular chosen from saporin and ricin,] or between an anti-idiotypic antibody according to claim 25 and a radioactive element[, such as iodine-125 or -131].--

Amend claim 30 as follows:

C/C2

--30. (amended) Anti-idiotypic antibody according to claim 25 produced by the following steps:

- purified VEGF is injected into [an animal, in particular] a rabbit,

- blood is withdrawn to recover purified Ig containing specific anti-VEGF IgG, [for example by affinity chromatography for protein A,] and then in [a possible] an optional stage the specific anti-VEGF IgG are purified from the purified Ig[, for example by affinity chromatography for VEGF],

B4
- [the above-mentioned] said purified Ig or [the above-mentioned] said purified anti-VEGF IgG are injected into [an animal of the same species as that used for injection of the VEGF, in particular into] the popliteal ganglions of a rabbit of the same origin as that used for injection of the VEGF,

- blood is withdrawn to recover the total Ig, [for example by protein A,] and then to subject the total Ig to two immunoadsorptions:

- an immunoadsorption on an affinity column prepared with the pre-immune Ig of the rabbit which has been used to produce the anti-VEGF IgG, to eliminate the anti-allotypic or isotypic antibodies,
- an immunoadsorption on an affinity column prepared with the anti-VEGF IgG, to purify the anti-idiotypes.--

Amend claim 31 as follows:

--31. (amended) Process for the preparation of an anti-idiotypic antibody according to claim 25, comprising:

- injecting purified VEGF into [an animal, in particular] a rabbit,

- withdrawing blood to recover purified Ig containing specific anti-VEGF IgG, [for example by affinity chromatography for protein A,] and then in [a possible] an optional stage the specific anti-VEGF IgG are purified from the purified Ig[, for example by affinity chromatography for VEGF],

- injecting [the above-mentioned] said purified Ig or [the above-mentioned] said purified anti-VEGF IgG into [an animal of the same species as that used for injection of the VEGF, in particular into] the popliteal ganglions of a rabbit of the same origin as that used for injection of the VEGF,

- withdrawing blood to recover the total Ig, for example by protein A, and then to subject the total Ig to two immunoadsorptions:

- an immunoadsorption on an affinity column prepared with the pre-immune Ig of the rabbit which has been used to produce the anti-VEGF IgG, to eliminate the anti-allotypic or isotypic antibodies,
- an immunoadsorption on an affinity column prepared with the anti-VEGF IgG, to purify the anti-idiotypes.--